

U. S. PTO Customer No. 25280

Case #5682A

REMARKS**35 USC Section 103 Rejections:**

Claims 1-3, 5-8 and 11 were rejected under 35 USC Section 103(a) as unpatentable over Bullock et al. (USPN 6,251,210).

The Examiner argues that Bullock et al. disclose that the secondary treatment composition is applied to a fabric in an amount that is at least 4 weight percent of the composition (Abstract) and that this amount is approximately the same as that claimed by Applicants (i.e. less than about 4 weight percent).

However, Applicants respectfully point out that the treated textile fabric taught by Bullock has a primary treatment composition on both sides of the treated textile fabric in an amount of at least 5 weight percent (Abstract) See also col. 4 (lines 57-60) where it states:

...the primary treatment composition should uniformly coat both sides (i.e. surfaces) of the fabric as well as penetrating the surfaces of the fabric to cover the interstitial spaces within the fabric.

Next, a secondary treatment is added to one side of textile fabric in an amount that is at least about 4 weight percent (Abstract). See also col. 5 (lines 46-47) where it states:

The secondary treatment composition is applied to one side of the primarily treated fabric.

Thus, the treated textile fabric taught by Bullock has at least 9 weight percent of a treatment composition on one side of the fabric (primary plus secondary) and at least about 5 weight percent of a treatment composition on the other side of the fabric (primary).

Additionally, with regard to the teaching of a hydrophobic crosslinking agent, Applicants provided evidence in their previous response (see Response dated 6/1/06 and Exhibits A and B) that Bullock teach crosslinking agents that are hydrophilic in nature. The Examiner has asserted that the epoxy resins taught by Bullock (col. 17, lines 33-58) are hydrophobic in nature.

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Applicants respectfully disagree with this assertion by the Examiner. No evidence whatsoever is provided which supports this assertion. The epoxy resins are described in the same paragraph as the melamine formaldehyde and phenol formaldehyde resins, which Applicants have already established are hydrophilic in nature. Accordingly, Applicants respectfully contend that the Examiner has provided no basis for assuming that the epoxy resins taught by Bullock are hydrophobic.

Accordingly, Applicants respectfully submit that this rejection fails to establish a *prima facie* showing of obviousness, since the reference fails to disclose expressly claimed elements or limitations of Applicants' claimed invention. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and MPEP 2143.03. As such, reconsideration and withdrawal of this rejection is earnestly requested.

Claim 10 was rejected under 35 USC Section 103(a) as unpatentable over Bullock et al. as applied to claim 8 and further in view of Fitzgerald et al. (USPN 6,451,717).

The Examiner submits that Bullock is silent as to the fluoropolymers to be used in the treated textile. The Examiner cites Fitzgerald et al. to teach an aqueous emulsion for imparting oil and water repellency to textiles comprising an aromatic blocked isocyanate and fluoropolymer (Abstract). The Examiner further states that the patent teaches the use of fluoropolymers that include perfluoroalkyl groups connected to polyurethane or (meth)acrylate groups (col. 1, lines 60-67). (Meth)acrylate is to include methacrylate, acrylate, or a combination of these groups (col. 1, line 67 – col. 2, line 2). Thus, the Examiner contends that it would have been obvious to a person having ordinary skill in the art to modify the article of Bullock et al. with the fluoropolymers of Fitzgerald et al.

With regard to claim 10, Applicants respectfully rely on the argument presented above with regard to the deficiencies of Bullock et al. Since claim 10 depends indirectly from claim 1, Applicants respectfully contend that the rejection lacks a *prima facie* showing of obviousness because the combination of references fail to disclose expressly claimed elements of Applicants' claimed invention, as previously discussed. Thus, reconsideration and withdrawal of this rejection is earnestly requested.

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Claims 1-4, 7, 8, 10 and 11 were rejected under 35 USC Section 103(a) as unpatentable over Linert et al. (US 2003/139521 A1).

The Examiner contends that Linert et al. teach a fluorochemical composition to render a fabric oil and/or water repellent comprising not more than 4% fluoropolymer such as a fluorinated ester, blocked isocyanates, fungicidal agents (Abstract, [0071-73]). The applied patent is silent as to the hydrophobicity of the disclosed crosslinking components. However, as the invention is directed for use as a stain and water repellent textile fabric, the Examiner believes it is reasonable to presume that the crosslinking agents taught by Linert et al. are hydrophobic. The applied patent is also silent as to the incorporation of an antimicrobial agent. However, the Examiner contends that it would have been obvious to one having ordinary skill in the art to use an antimicrobial agent in the article of Linert et al. since the article already includes a fungicidal agent.

The Examiner further submits that the fluorochemical-containing soil release components recited in Applicant's claim 2 (i.e. fluorochemical-containing soil release component comprising a polymeric material selected from acrylate-containing polymers, methacrylate-containing polymers, urethane-containing polymers, and fluorinated esters) are mentioned by Linert in Paragraph 0084.

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art (MPEP § 2143.03). Applicants respectfully submit that Linert et al. fail to teach each and every limitation of the invention as recited in the instant claims. For example, Linert et al. fail to teach a fluorochemical-containing soil release component, as recited in claim 1. Additionally, Linert et al. also fail to teach a fluorochemical-containing soil release component selected from the group consisting of acrylate-containing polymers, methacrylate-containing polymers, urethane-containing polymers, and fluorinated esters, as recited in claim 2. Instead, Linert et al. teach polymers that contain perfluorovinyl ethers (title) that have a partially or fully fluorinated backbone (paragraph 0026).

With regard to the rejection of claim 2 specifically, the Examiner has cited Paragraph 0084 of Linert et al. as evidence of a teaching by Linert et al. of fluorochemical-containing soil release component selected from the group consisting of acrylate-containing polymers, methacrylate-containing polymers, urethane-containing polymers, and fluorinated esters.

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Paragraph 0084 of Linert states the following:

Yet a further class of extenders that can be advantageously used with the fluoropolymers in a fluorochemical treatment composition of this invention includes polymers of acrylic and/or methacrylic monomers. Particular examples of such polymers include homo- and copolymers of alkyl esters of acrylic and methacrylic acid such as for example C₁ to C₃₀ alkyl esters of acrylic acid. Specific examples of such alkyl esters include methyl acrylate, ethyl acrylate, butyl acrylate, octadecyl acrylate and lauryl acrylate. Specific examples of suitable polymers include a homopolymer of methyl acrylate and a copolymer of methyl acrylate and octadecyl acrylate.

Applicants respectfully submit that the teaching provided by the reference at Paragraph 0084 is not a teaching of the compounds recited in claim 2. Where is the teaching of a fluorine-containing compound? There is none. Thus, Applicants respectfully submit that Paragraph 0084, in contrast to the assertion by the Examiner, is not a teaching of a fluorochemical-containing soil release component, such as a fluorinated ester, as taught and claimed by Applicants.

Accordingly, since the cited art fails to teach the limitations as claimed by Applicants in independent claim 1, and since all of the other rejected claims each depend directly or indirectly from this claim, Applicants respectfully submit that the obviousness rejection of claims 1-4, 7, 8, 10 and 11 should not be maintained. Reconsideration and withdrawal of this rejection is earnestly requested.

Double Patenting Rejection:

Claims 1-8, 10 and 11 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 7, 24-25, 39-34; 1-70; and 1-21 of copending Application Nos. 10/659,900; 10/785,218; and 10/780,976.

Although the conflicting claims are not identical, the Examiner believes they are not patentably distinct from each other because all of the applications are directed to fluorochemically-treated fabrics.

Applicants note that the Examiner has not provided any details as to how the instantly claimed invention is not patentably distinct over claims 7, 24-25, 39-34; 1-70; and 1-21 of copending Application Serial Nos. 10/659,900; 10/785,218; and 10/780,976.

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The claims cited by the Examiner from Application Serial No. 10/659,900 are directed to a composition comprising a fluorine-containing repellent component, a polyurethane-containing hydrophilic resin, a fluorine-containing soil release component, and a crosslinking component. It is unclear to Applicants how this treatment composition is considered not patentably distinct over the instant claims, as asserted by the Examiner.

The claims cited by the Examiner from Application Serial No. 10/785,218 are directed to fiber-containing substrates having a Roughness Factor greater than or equal to about 1.10 and having a chemical mixture on its surface comprising a fluorocarbon-containing repellent component, a particulate component, and a crosslinking component and the method for making the fiber-containing substrates. It is unclear to Applicants how this substrate is considered not patentably distinct over the instant claims, as asserted by the Examiner.

Claims 1-8, 14, and 19-20 of copending Application Serial No. 10/780,976 have been cancelled. The remaining claims cited by the Examiner from Application Serial No. 10/780,976 are directed to a textile fabric having a cationic chemical treatment on a first surface and an anionic chemical treatment on a second surface. The cationic chemistry on the first surface repels oil, and the anionic chemistry on the second surface may contain a fluorosurfactant which wicks moisture. It is unclear to Applicants how this textile fabric is considered not patentably distinct over the instant claims, as asserted by the Examiner.

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Conclusion:

For the reasons set forth above, it is respectfully submitted that all claims now stand in condition for allowance.

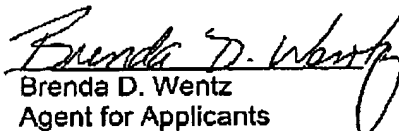
Should any issues remain after consideration of these Remarks, the Examiner is invited and encouraged to telephone the undersigned in the hope that any such issue may be promptly and satisfactorily resolved.

In the event that there are additional fees associated with the submission of these papers, authorization is hereby provided to withdraw such fees from Deposit Account No. 04-0500.

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Respectfully submitted,

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